

## CLAIMS

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. A method for providing a protocol layer firewall for an endpoint in a distributed network comprising at least one server having at least an object request broker and a usage based firewall manager and a plurality of computing locations each having at least one endpoint, comprising the steps of:

requesting an Application Action Object (AAO) from the at least one server;

decoding the endpoint to determine the physical network address for said endpoint;

creating an AAO with said decoded information;

registering the protocol request with the usage based firewall manager to obtain a session number for said AAO;

adding the session number to the AAO; and

returning the AAO to the application.

2. The method of Claim 1 further comprising monitoring the protocol usage at the endpoint.

3. The method of Claim 2 wherein said monitoring of the protocol usage comprises the steps of:

said application executing an action method on said AAO;  
routing the AAO to a responsible gateway in response to said  
action method; and  
notifying the usage based firewall manager that the protocol  
has been used.

4. The method of Claim 3 further comprising the step of  
determining if continued usage of the AAO at the endpoint is  
permissible.

5. The method of Claim 4 wherein said determining  
comprises the steps of:

retrieving stored maximums of requests for the protocol and  
application;

obtaining a current request count for the protocol and  
application;

comparing the current count to the configured maximum; and  
notifying the application of the results of said comparing.

6. The method of Claim 4 further comprising ceasing usage  
of said AAO based on said determining.

7. The method of Claim 5 further comprising ceasing usage  
of said AAO based on said determining.

8. The method of Claim 6 further comprising identifying an alternative endpoint to said application.

9. The method of Claim 7 further comprising identifying an alternative endpoint to said application.

10. A system for providing a protocol layer firewall for an endpoint in a distributed network comprising:

at least one object request broker for creating at least one application action object in response to an application request;  
and

a usage based firewall manager for establishing a session for monitoring said at least one application action object at said endpoint.

11. The system of Claim 10 further comprising at least one decoder component for decoding the endpoint.

12. The system of Claim 10 further comprising monitoring means for monitoring the protocol usage at the endpoint.

13. The system of Claim 12 wherein said monitoring means comprises at least one logical gateway for detecting action requests at said application action object and for notifying the usage based firewall manager that the protocol has been used.

14. The system of Claim 13 wherein said usage based firewall manager further comprises a determining component for determining if continued usage of the AAO at the endpoint is permissible.

15. The system of Claim 14 further comprising at least one storage location for storing configuration information regarding maximum requests per endpoint and wherein said determining component includes a comparator for comparing the current count of requests at the endpoint to the stored maximum requests for that endpoint.

16. The system of Claim 14 further comprising means for identifying at least one alternative endpoint to said application.

17. A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for providing a protocol layer firewall for an endpoint in a distributed network comprising at least one server having at least an object request broker and a usage based firewall manager and a plurality of computing locations each having at least one endpoint, said method comprising the steps of:

receiving an Application Action Object (AAO) at the at least one server;

decoding the endpoint to determine the physical network address for said endpoint;

5       creating an AAO with said decoded information;

registering the protocol request with the usage based firewall manager to obtain a session number for said AAO;

adding the session number to the AAO; and

returning the AAO to the application.

10       18. The program storage device of Claim 17 wherein said method further comprises monitoring the protocol usage at the endpoint.

19. The program storage device of Claim 18 wherein said method further comprises the steps of:

15       determining if continued usage of the AAO at the endpoint is permissible; and

notifying the application about the results of said determining.

20       20. The program storage device of Claim 19 wherein said determining method comprises the steps of:

retrieving stored maximums of requests for the protocol and application;

obtaining a current request count for the protocol and application; and

comparing the current count to the configured maximum.

21. The program storage device of Claim 19 wherein said method further comprises monitoring activity at a plurality of endpoints and identifying at least one alternative endpoint to said application.

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